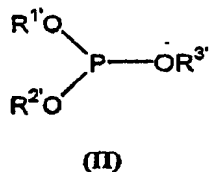
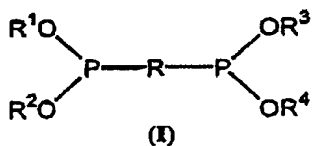


WHAT IS CLAIMED IS:

1. An adhesive silicone elastomer composition which  
can be crosslinked under hot conditions by polyaddition  
5 (hydrosilylation), this composition being of the type  
of those comprising:

- ♦  $\alpha$ / at least one PolyOrganoSiloxane (POS) carrying  
ethylenic and/or acetylenic unsaturation(s) {POS  
comprising  $\equiv\text{Si}$ -[unsaturation] units};
- 10 ♦  $\beta$ / at least one polyorganosiloxane (POS) carrying  
 $\equiv\text{Si-H}$  units;
- ♦  $\gamma$ / a catalytic combination comprising:
  - $\gamma.1$  at least one metal catalyst (preferably  
based on platinum)
  - 15 -  $\gamma.2$  and at least one crosslinking inhibitor;
- ♦  $\delta$ / a filler;
- ♦  $\epsilon$ / at least one adhesion promoter;
- ♦  $\rho$ / at least one POS resin;
- ♦  $\lambda$ / at least one agent for stability toward heat;
- 20 ♦  $\phi$ / optionally at least one other functional  
additive;

characterized in that it is a single-component  
composition and in that the crosslinking inhibitor  $\gamma.2$   
is selected from the group of compounds of following  
25 formula (I) or (II):



in which:

R,  $\text{R}^1$ ,  $\text{R}^2$ ,  $\text{R}^3$ ,  $\text{R}^4$ ,  $\text{R}^1'$ ,  $\text{R}^2'$  and  $\text{R}^3'$ , which are identical

or different, represent a linear, branched or cyclic alkyl radical or a substituted or unsubstituted aryl radical, in particular:

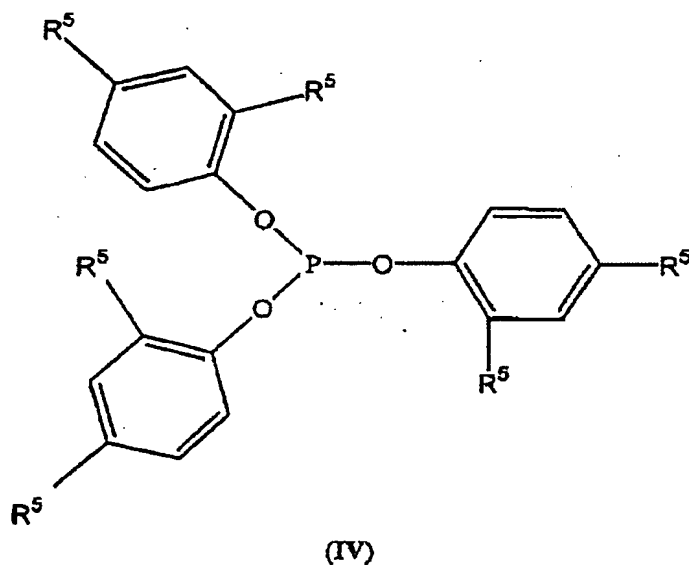
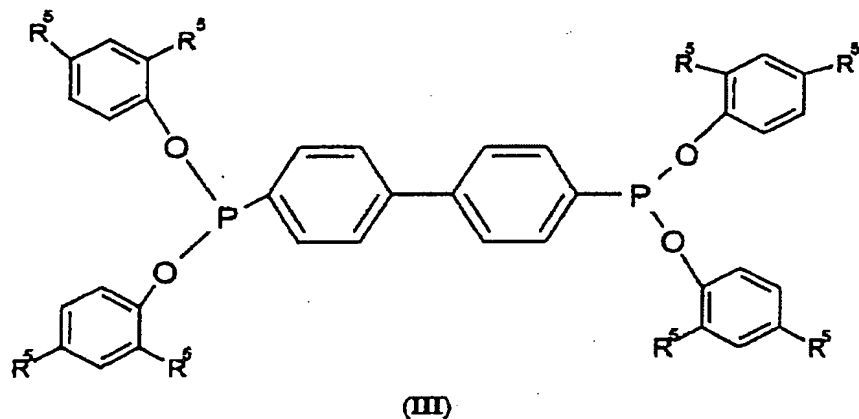
- 5 i. a linear or branched alkyl radical having in particular from 2 to 30 carbon atoms (C), preferably from 2 to 12 C,
- ii. an alkyl radical comprising one or more rings, in particular 1 or 2, it being possible for a ring to have in particular from 4 to 14 C, preferably from 10 5 to 8 C, or
- iii. an aryl or alkylaryl radical comprising one or more fused or nonfused aromatic rings, in particular 1 or 2 rings, it being possible for a ring to comprise from 4 to 14 C, preferably from 6 15 to 8 C, optionally substituted by 1 or more, in particular from 1 to 2, linear or branched alkyl(s) having in particular from 1 to 12 C, preferably from 4 to 12 C.

20 2. The composition as claimed in claim 1, characterized in that the R radical of the formula (I) of the inhibitor  $\gamma.2$  is a cyclic alkyl or an aryl radical, preferably the biphenyl radical.

25 3. The composition as claimed in claim 1, characterized in that the  $R^1$ ,  $R^2$ ,  $R^3$ ,  $R^4$ ,  $R^{1'}$ ,  $R^{2'}$  and  $R^{3'}$  radicals of the formulae (I) and (II) of the inhibitor  $\gamma.2$  are cyclic alkyls, aryls or alkylaryls, preferably substituted phenyls.

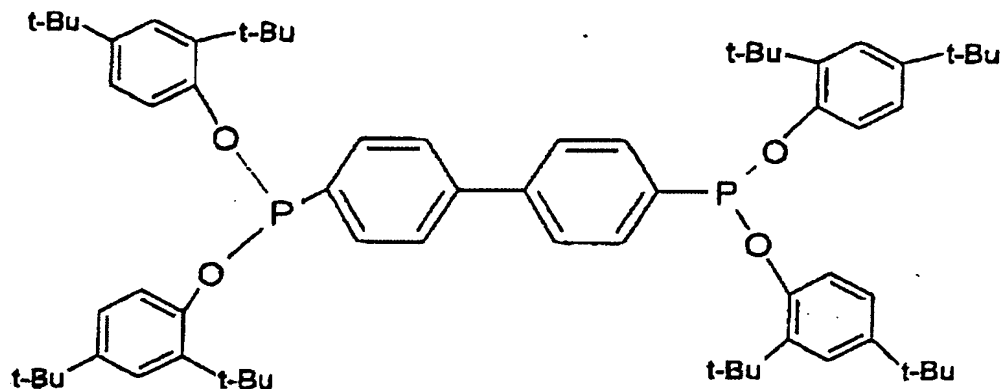
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4. The composition as claimed in claim 1, characterized in that the inhibitor  $\gamma.2$  corresponds to either of the following formulae (III) and (IV):

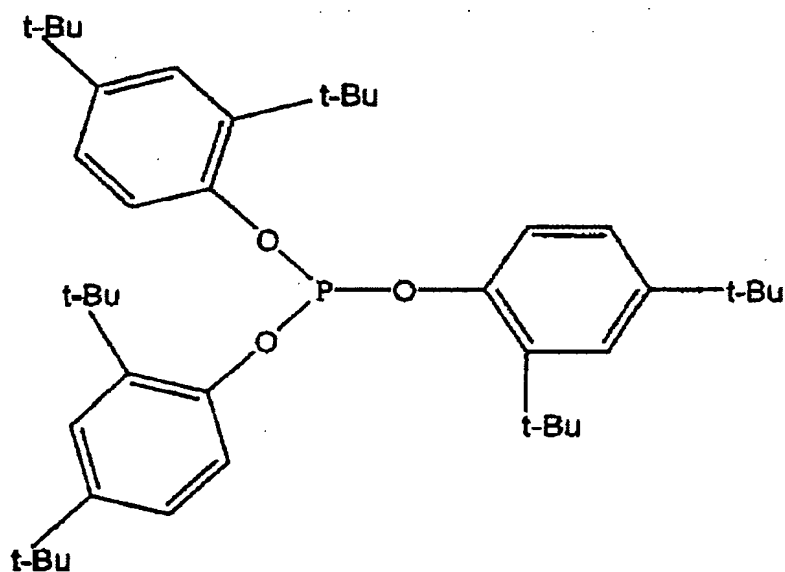


in which the  $R^5$  radicals, which are identical or  
 5 different, preferably identical, are linear or branched  
 alkyls having in particular from 1 to 12 C, preferably  
 from 4 to 12 C.

5. The composition as claimed in claim 1,  
 10 characterized in that the inhibitor  $\gamma.2$  corresponds to  
 the formula (V) or (VI):



(V)



(VI)

6. The composition as claimed in any one of claims 1  
5 to 5, characterized in that the catalyst  $\gamma.1$  is a  
platinum catalyst.

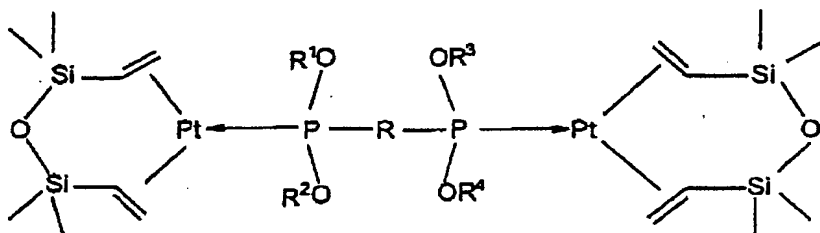
7. The composition as claimed in any one of claims 1  
to 6, characterized in that the phosphorus of  
10  $\gamma.2$ /platinum of  $\gamma.1$  ratio by weight is such that:

- $P/Pt \geq 1$ ,
- preferably,  $5 \geq P/Pt \geq 1$ ,
- and, more preferably still,  $4 \geq P/Pt \geq 1$ .

15 8. The catalytic composition as claimed in claim 6,  
characterized in that the catalyst  $\gamma.1$  is a platinum/

unsaturated siloxane complex, preferably a platinum/vinylsiloxane complex and more preferably still a Karstedt complex.

- 5 9. The composition as claimed in claim 8, characterized in that the catalytic combination  $\gamma$  comprises the following chemical entity (I'):



(I')

10

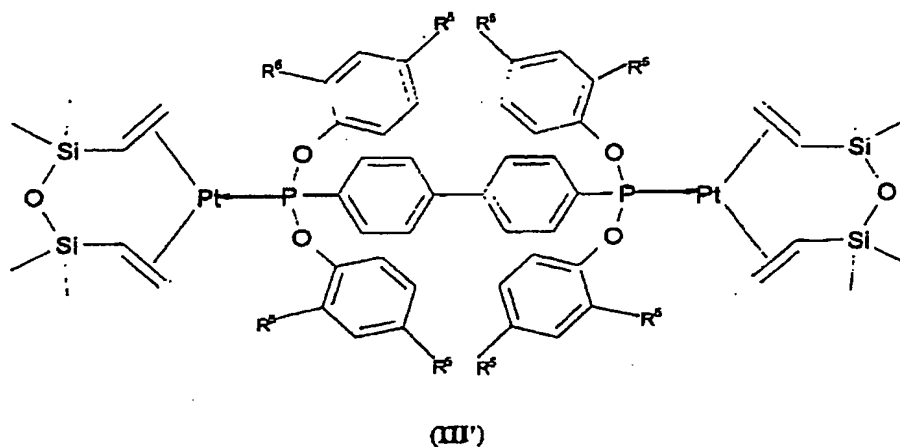
in which:

R, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup>, which are identical or different, represent a linear, branched or cyclic alkyl radical or a substituted or unsubstituted aryl radical, in particular:

- 15 i. a linear or branched alkyl radical having in particular from 2 to 30 carbon atoms (C), preferably from 2 to 12 C,
- 20 ii. an alkyl radical comprising one or more rings, in particular 1 or 2, it being possible for a ring to have in particular from 4 to 14 C, preferably from 5 to 8 C, or
- 25 iii. an aryl or alkylaryl radical comprising one or more fused or nonfused aromatic rings, in particular 1 or 2 rings, it being possible for a ring to comprise from 4 to 14 C, preferably from 6 to 8 C, optionally substituted by 1 or more, in particular from 1 to 2, linear or branched alkyl(s) having in particular from 1 to 12 C,
- 30 preferably from 4 to 12 C.

10. The composition as claimed in claim 9,

characterized in that the catalytic combination  $\gamma$  comprises the following chemical entity (III'):

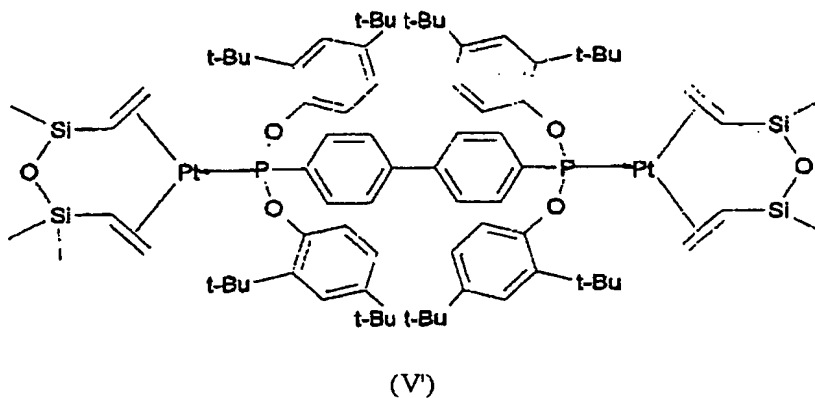


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in which the R<sup>5</sup> radicals, which are identical or different, preferably identical, are linear or branched alkyls having in particular from 1 to 12 C, preferably from 4 to 12 C.

10

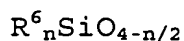
11. The composition as claimed in claim 10, characterized in that the catalytic combination  $\gamma$  comprises the following chemical entity (V'):



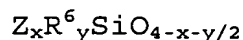
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12. The composition as claimed in claim 1, characterized in that:

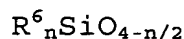
- ♦ the  $\alpha$  POS or POSSs comprise siloxyl units



and siloxyl units of formula:

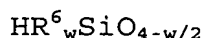


5   ♦   the  $\beta$  POS or POSs comprise siloxyl units



and siloxyl units of formula:

10



in which formulae the various symbols have the following meaning:

15    $\Rightarrow$    the  $R^6$  symbols, which are identical or different, each represent a nonhydrolyzable group of hydrocarbon nature, it being possible for this radical to be:

- 20   \*   an alkyl radical having from 1 to 5 carbon atoms which can comprise from 1 to 6 chlorine atoms,
- \*   cycloalkyl radicals having from 3 to 8 carbon atoms which can comprise from 1 to 4 chlorine atoms,
- 25   \*   aryl or alkylaryl radicals having from 6 to 8 carbon atoms which can comprise from 1 to 4 chlorine atoms,
- \*   cyanoalkyl radicals having from 3 to 4 carbon atoms; methyl, ethyl, propyl, isopropyl,
- 30   butyl, isobutyl, n-pentyl, t-butyl, chloromethyl, dichloromethyl,  $\alpha$ -chloroethyl,  $\alpha,\beta$ -dichloroethyl,  $\beta$ -cyanoethyl,  $\gamma$ -cyano-propyl, phenyl, p-chlorophenyl, m-chlorophenyl, 3,5-dichlorophenyl, trichlorophenyl,
- 35   tetrachlorophenyl, o-, p- or m-tolyl, and xylyl, such as 2,3-dimethylphenyl or 3,4-dimethylphenyl, groups being preferred; methyl and phenyl radicals being particularly preferred;

- ⇒ the Z symbols represent a C<sub>2</sub>-C<sub>6</sub> alkenyl group (preferably a vinyl group);
- ⇒ n = an integer equal to 0, 1, 2 or 3;
- ⇒ x = an integer equal to 0, 1, 2 or 3;
- 5 ⇒ y = an integer equal to 0, 1 or 2;
- ⇒ the sum x + y lies within the range from 1 to 3,
- ⇒ w = an integer equal to 0, 1, 2 or 3.

13. The composition as claimed in claim 12,  
10 characterized in that it comprises:

- α/ - at least one POS exhibiting, per molecule, at least two C<sub>2</sub>-C<sub>6</sub> alkenyl groups bonded to silicon;
- β/ - at least one POS exhibiting, per molecule, at least two hydrogen atoms bonded to silicon;
- 15 - γ/ - a catalytic combination as defined in claims 2 to 12;
- ε/ an adhesion promoter, preferably a binary adhesion promoter and more preferably still an adhesion promoter consisting of:
  - 20    △ ε.1 △ at least one alkoxyated organosilane comprising, per molecule, at least one C<sub>2</sub>-C<sub>6</sub> alkenyl group,
  - △ ε.2 △ at least one organosilicon compound comprising at least one epoxy radical;
- 25 - δ/ an inorganic and/or microsphere and/or hollow and/or expanded and/or expandable inorganic filler;
- ρ/ optionally at least one POS resin carrying T and/or Q, optionally M and/or D, siloxyl units and alkenyl-comprising siloxyl units, preferably
- 30 vinyl-comprising siloxyl units of M<sup>vi</sup> and/or D<sup>vi</sup> type, resins of MM<sup>vi</sup>DD<sup>vi</sup>Q type being very particularly preferred;
- λ/ optionally at least one colorant;
- 35 - φ/ optionally at least one other functional additive.

14. The composition as claimed in claim 12 or 13, characterized in that it is an RTV composition and in



100

100

100

100

100

- 100

100

- 100

100

100

100